

COVID-19 Vaccine Storage, Preparation and Administration Chart

The COVID-19 Vaccine Storage, Preparation and Administration Chart is a guide for vaccine providers that reflects best practices for vaccine storage and handling from Advisory Committee on Immunization Practices (ACIP) recommendations, product information from vaccine manufacturers and scientific studies. This chart presents guidelines for Pfizer (purple, gray and orange cap), Moderna (full dose and booster) and Janssen COVID-19 vaccines. Proper vaccine storage and handling practices play an important role in protecting individuals and communities from vaccine-preventable diseases. Vaccine quality is the shared responsibility of everyone involved, from the time vaccine is manufactured until it is administered. For more information or questions about transporting vaccine, please contact the Indiana Department of Health Immunization Division at 1-800-701-0704 or immunize@isdh.in.gov.

	Storage (Prior to Puncture)									
	Pfizer (purple cap)			Pfizer (gray cap)		Pfizer (orange cap)		Moderna (full dose and booster dose)		Janssen
	Ultra-Cold	Frozen	Refrigerated	Ultra-Cold Freezer	Refrigerated	Ultra-Cold Freezer	Refrigerated	Frozen	Refrigerated	Refrigerated
Temperature	-90° C to -60° C (-130° F to -76° F)	-25°C to -15°C (-13°F to 5°F)	2° C to 8° C (36° F to 46° F)	-90° C to -60° C (-130° F to -76° F)	2° C to 8° C (36° F to 46° F)	-90° C to -60° C (-130° F to -76° F)	2° C to 8° C (36° F to 46° F)	-25° C to -15° C (-13° F to 5° F)	2°C to 8°C (36°F to 46°F)	2° C to 8° C (36° F to 46° F)
Maximum time at temp	Until expiration date	2 weeks	1 month	Until expiration date	10 weeks	Until expiration date	10 weeks	Until expiration date	30 days	Until expiration date
Arrangement	Upright in the full tray or box	Upright in the full tray or box	Upright in the tray or box	Upright in the full tray or box	Upright in the tray or box	Upright in the full tray or box	Upright in the tray or box	Upright in original carton	Upright in trays or individual	Upright in trays or individual
Handling	Protect from light.	Protect from light. May move back to ultra-cold storage for two weeks.	Protect from light. Do NOT refreeze.	Protect from light. Do NOT freeze between -25° C to -15° C (-13° F to 5° F).	Protect from light. Do NOT refreeze.	Protect from light. Do NOT freeze between -25° C to -15° C (-13° F to 5° F).	Protect from light. Do NOT refreeze.	Protect from light.	Can be in room light. Do NOT refreeze.	Protect from light. Do NOT refreeze.



Preparation and Administration

	Pfizer (Purple Cap)	Pfizer (Gray Cap)	Pfizer (Orange Cap)	Moderna (full dose)	Moderna (booster dose)	Janssen
Doses per vial	6 (after dilution)	6	10 (after dilution)	10-11 or 14 -15 depending on the vial size	Maximum of 20	5
Dosage	0.3 mL	0.3 mL	0.2 mL	0.5 mL	0.25 mL	0.5 mL
Active Ingredient	30 mcg mRNA	30 mcg mRNA	10 mcg mRNA	100mcg mRNA	~50 mcg mRNA	5×10 ¹⁰ virus particles
THAW in Refrigerator	2° C to 8° C (36° F to 46° F) for 2-3 hours. For immediate use, thaw at room temp up to 25°C (77°F) for 30 minutes until room temperature before diluting.	2° C to 8° C (36° F to 46° F) for up to 6 hours. For immediate use, thaw at room temp up to 25°C (77°F) for 30 minutes until room temperature.	2° C to 8° C (36° F to 46° F) for 4 hours. For immediate use, thaw at room temp up to 25°C (77°F) for 30 minutes until room temperature.	2° C to 8° C (36° F to 46° F) for 4 hours. For immediate use, thaw at 8°C to 25°C (46°F to 77°F) for 15 minutes until room temperature.	2° C to 8° C (36° F to 46° F) for 2.5-3 hours. For immediate use, thaw at 8°C to 25°C (46°F to 77°F) for 15 minutes until room temperature.	Vaccine should arrive at 2° C to 8° C (36° F to 46° F). For immediate use, thaw at 8°C to 25°C (46°F to 77°F) for 15 minutes until room temperature.
Refrigerated UNPUNCTURED Lifespan	1 month at 2° C to 8° C (36° F to 46° F)	10 weeks at 2° C to 8° C (36° F to 46° F)	10 weeks at 2° C to 8° C (36° F to 46° F)	30 days at 2° C to 8° C (36° F to 46° F)	30 days at 2° C to 8° C (36° F to 46° F)	Until expiration date at 2° C to 8° C (36° F to 46° F)
Refrigerated PUNCTURED Lifespan	6 hours at 2°C to 25°C (36°F to 77°F)	12 hours at 2°C to 25°C (36°F to 77°F) after first puncture	12 hours at 2°C to 25°C (36°F to 77°F) after dilution	12 hours at 2°C to 25°C (36°F to 77°F)	12 hours at 2°C to 25°C (36°F to 77°F)	6 hours at 2°C and 8°C (36°F and 46°F)
Thaw at Room Temp	Up to 25°C (77°F) for 30 minutes to a maximum of 2 hours before dilution	Up to 25°C (77°F) for 30 minutes to a maximum of 12 hours	Up to 25°C (77°F) for 30 minutes to a maximum of 12 hours	15° to 25°C (59°F to 77°F) for 1 hour to a maximum of 24 hours	15° to 25°C (59°F to 77°F) for 1 hour to a maximum of 24 hours	9°C to 25°C (47°F to 77°F) for 15 minutes to a maximum of 12 hours
Room Temp UNPUNCTURED Lifespan	Must be diluted within 2 hours at up to 25°C (77°F) or returned to refrigerator	12 hours at 2°C to 25°C (36°F to 77°F) prior to first puncture	12 hours at up to 25°C (77°F)	24 hours at 2°C to 25°C (36°F to 77°F)	24 hours at 2°C to 25°C (36°F to 77°F)	12 hours at 9°C to 25°C (47°F to 77°F)
Room Temp PUNCTURED Lifespan	6 hours at up to 25°C (77°F)	12 hours at up to 25°C (77°F) after first puncture	12 hours at up to 25°C (77°F)	12 hours at 2°C to 25°C (36°F to 77°F)	12 hours at 2°C to 25°C (36°F to 77°F)	2 hours at 9°C to 25°C (47°F to 77°F)
Handling	Minimize exposure to room light and avoid exposure to direct sunlight and ultraviolet light.	Minimize exposure to room light and avoid exposure to direct sunlight and ultraviolet light.	Thawed vials can be handled in room light conditions.	Thawed vials can be handled in room light conditions.	Thawed vials can be handled in room light conditions.	Thawed vials can be handled in room light conditions.
Preparation	Gently invert the vial 10 times to mix before and after adding the diluent, 1.8 mL of 0.9% sodium chloride. Do NOT shake the vial.	Do NOT dilute . Before use, gently invert the vial 10 times to mix. Do NOT shake the vial.	Gently invert the vial 10 times to mix before and after adding the diluent, 1.3 mL of 0.9% sodium chloride. Do NOT shake the vial.	Do NOT dilute . Gently swirl before first puncture and between each withdrawal. Do NOT shake the vial. Do NOT exceed 20 punctures per vial .	Do NOT dilute . Gently swirl before first puncture and between each withdrawal. Do NOT shake the vial. Do NOT exceed 20 punctures per vial .	Do NOT dilute . Gently swirl before first puncture and between each withdrawal for 10 seconds. Do NOT shake the vial.